I claim:

1. A method for rendering a display on a computer system, the display having a plurality of objects, the method comprising the steps of:

loading an index table in a secondary memory of the computer system, the index table containing a plurality of entries directed to particular ones of the objects of the plurality of objects, and the index table being derived from a modified quad tree representation of the display, the modified quad tree consisting of a quad tree and a balanced search tree;

retrieving, from the plurality of entries, information describing the particular ones of the objects; and

rending the display on the computer system as a function of the retrieved information, the display being a two-dimensional representation of the retrieved information.

2. The method of claim 1 wherein the loading of the index table is determined as a function of a viewer capacity cap, the viewer capacity cap being a function of (a) a total number of objects which can be displayed on the computer system and (b) a density factor, the density factor being determined as a function of a number of objects per pixel count.

3. The method of claim 2 wherein the modified quad tree includes a plurality of nodes, each node having a plurality of cells such that each cell may hold information about more than one object of the plurality of objects.

4. The method of claim 3 wherein the modified quad tree is derived as a function of a topology of the display.

5. The method of claim 3 wherein the loaded index table contains entries for only those objects within a viewing area defined by a user of the computer system.

6. The method of claim 3 comprising the further step of:

inserting objects in the index table by modifying the plurality of entries as a function of (i) a cell id associated with a particular cell of the plurality of cells, and (ii) a depth level associated with the plurality of cells.

7. The method of claim 6 wherein the topology is of a communications network.

8. A graphical display system comprising:

a secondary memory;

a processor for executing a user interface application program and for controlling the operation of the graphical display system in accordance with the functions defined by a plurality of program instructions of the user interface application program, the plurality of program instructions defining the steps of:

(i) loading an index table in the secondary memory, the index table containing a plurality of entries directed to particular objects of a plurality of objects of a display, and the index table being derived from a modified quad tree representation of the display, the modified quad tree consisting of a quad tree and a balanced search tree;

(ii) retrieving, from the plurality of entries, information describing the particular objects; and

(iii) rending a two-dimensional representation of the retrieved information; and;

a monitor for displaying the rendered two-dimensional representation.

9. The graphical display system of claim 8 wherein the loading of the index table is determined as a function of a viewer capacity cap, the viewer capacity cap being a function of (a) a total number of objects which can be displayed on the graphical display system and (b) a density factor, the density factor being determined as a function of a number of objects per pixel count.

10. The graphical display system of claim 8 wherein the modified quad tree includes a plurality of nodes, each node having a plurality of cells such that each cell may store information about more than one object of the plurality of objects.

11. The graphical display system of claim 10 wherein the loaded index table contains entries for only those objects within a viewing area defined by a user of the graphical display system.

12. The graphical display system of claim 10 wherein the plurality of program instructions defining the further step of:

inserting objects in the index table by modifying the plurality of entries as a function of (i) a cell id associated with a particular cell of the plurality of cells, and (ii) a depth level associated with the plurality of cells.

13. A machine-readable medium having stored thereon a plurality of instructions, the plurality of instructions including instructions that, when executed by a machine, cause the machine to perform a method of a rending a two-dimensional display, the two-dimensional display having a plurality of objects, on a computer system by (i) loading an index table in a secondary memory of the computer system, the index table containing a plurality of entries directed to particular ones of the objects of the plurality of objects, and the index table being derived from a modified quad tree representation of the display, the modified quad tree consisting of a quad tree and a balanced search tree; (ii) retrieving, from the plurality of entries, information describing the particular ones of the objects; and (iii) rending the two-dimensional display on the computer system as a function of the retrieved information.

14. The machine-readable medium of claim 13 wherein the loaded index table contains entries for only those objects within a viewing area defined by a user of the computer system.

15. The machine-readable medium of claim 14 wherein the modified quad tree representation of the information is derived as a function of a topology of the two-dimensional display.